

CLAIMS

1. Roof-rack bar for automobile vehicles of the type comprising a transverse bar and two fastening feet mounted at the ends of said transverse bar and lying in the axis of the latter, said feet being provided to operate in conjunction with the guidance and maintenance side rails mounted on said automobile vehicle and being capable of sliding along said side rails in an adjustment position, the angle between said transverse bar and each of said side rails remaining more or less constant when the bar is displaced along side rails,  
5 characterized in that at least one of said feet comprises a housing in which one end of said transverse bar can slide between two extreme positions in order to adapt to a variable distance between said side rails, said housing comprising first locking and/or reinforcement means capable of operating in  
10 conjunction with second complementary locking and/or reinforcement means fitted on said transverse bar to immobilize or authorize the displacement of said end of the transverse bar inside said housing.  
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2. Roof-rack bar of claim 1 characterized in that said second locking and/or reinforcement means fitted on said transverse bar operate in conjunction with said first locking and/or reinforcement means in the locked position in order to eliminate or reduce the transversal play between said transverse bar and the surfaces of said housing.

3. Roof-rack bar of either of claims 1 and 2 characterized in that said first locking and/or reinforcement means comprise at least one male (respectively female) component capable of operating in conjunction with, and of complementing, at least one female (respectively male) component fitted on the transverse bar.
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4. Roof-rack bar of any of claims 1 to 3 characterized in that in the locked position said first and second locking and/or reinforcement means constitute a gear system comprising at least one tooth.
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5. Roof-rack bar of any of claims 1 to 4 characterized in that said first and second locking and/or reinforcement means comprise at least one rack.
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6. Roof-rack bar of claim 5 characterized in that said rack is transversally mobile relative to the longitudinal axis of the transverse bar.
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7. Roof-rack bar of either of claims 5 and 6 characterized in that said transverse bar comprises a mobile component capable of sliding along said transverse bar and of operating in conjunction with said rack such that it draws it between the locked and unlocked position and vice versa.
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8. Roof-rack bar of claim 7 characterized in that said mobile component has at least one slope against which one or more support components of said rack are capable of coming to bear.
9. Roof-rack bar of any of claims 1 to 8 characterized in that it comprises at least one means for actuating the locking/unlocking of said transverse bar that projects into a recess of said transverse bar or one of said feet.
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10. Roof-rack bar of claim 9 characterized in that said actuating means are coupled to said mobile component via at least one cable running inside said transverse bar.
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11. Roof-rack bar of any of claims 1 to 10 characterized in that it comprises at least one actuating means that act simultaneously on:

- locking/unlocking said transverse bar in said housing;
- immobilization means fitted on at least one of said fastening feet such that they authorize or prevent said feet from being displaced along said guidance side rails.
- 5       12. Roof-rack bar of claim 11 characterized in that said actuating means control the immobilization of the two fastening feet.
- 10      13. Roof-rack bar of claim 12 characterized in that said actuating means are fitted onto one of said feet and that said means for immobilizing the opposite foot are connected to said second locking and/or reinforcement means.
- 15      14. Roof-rack bar of claim 13 characterized in that said actuating means are connected to said via a first cable to said first or second locking and/or reinforcement means, a second cable connecting said first or second locking and/or reinforcement means to the means for immobilizing said opposite foot.
- 20      15. Roof-rack bar of claim 14 characterized in that a compensating part is mounted in the axis of said second cable such that the travel of said second cable is shorter than that of the first.
- 25      16. Roof-rack for automobile vehicles consisting of at least two roof-rack bars, characterized in that at least one of them is a roof-rack bar of any of claims 1 to 15.
17. Roof-rack of claim 16 characterized in that one of said bars is fixed.
18. Roof-rack of either of claims 16 or 17 characterized in that said roof-rack bars can be grouped together to constitute an aerofoil.